COASTAL IMPACT ASSISTANCE PROGRAM (CIAP) FY 2010 Tier I

- 1. PROJECT TITLE: Development of an East Bank Wetland Wastewater Assimilation Process Plant
- 2. ENTITY NOMINATING THE PROJECT: St. James Parish Council

3. CONTACT INFORMATION: Mr. Jody Chenier

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4. TOTAL CIAP FUNDS REQUESTED: \$1,550,000

5. Parish CIAP Funds Requested: \$1,550,000

6. STATE CIAP FUNDS REQUESTED: None

7. INFRASTRUCTURE FUNDS PROPOSED: None

8. DESCRIPTION AND LOCATION OF PROJECT: The St. James Parish Council plans to purchase property and construct a wetland assimilation treatment plant in Grand Point, La. The plant will collect wastewater from secondary treatment modules and pump the wastewater to the pond area. The pond will discharge into forested wetland areas that will directly affect the swamp land composition and structure. The effluent discharge will be controlled to maximize sediment discharge and improve water quality. The project will use proven scientific research and analysis to provide a wetland wastewater strategy to promote wetland growth and survival. The project will deliver low cost benefits to Parish residents and businesses and improve water quality and enhance deteriorating wetland areas. Unlike conventional tertiary treatment and filterization, the wetland assimilation process reduces the need for chemical treatment and reduces maintenance cost such as electricity and labor. A wetland treatment process allows for a more natural system and provides for value added wetland production and absorption. Additionally, the use of a wetland assimilation process will provide a wetland fertilization source, as well as, the removal of excess nutrients, especially nitrogen and phosphorus. The wetland treatment process provides needed sediment and nutrients for the protection of wetlands, wildlife habitat, and forest re-generation. The Parish will match existing sewerage construction funds to develop a sewer line system to connect all of the surrounding (Grand Point) area into this wetland enhancement project. The

project will provide a means to fully integrate the sewerage treatment needs of all businesses and residents within the project target area.

- 9. PROJECT TYPE: Conservation, restoration, and protection of coastal areas. Within the target area, there are no treatment ponds or municipal sewerage treatment systems. Presently, all residential and commercial structures discharge into open ditches from individual sewerage treatment plants. The development of a waste water assimilation plant to collect and properly treat sewerage before discharging into wetland areas would provide a beneficial wetland use. This project would not only eliminate neighborhood discharges in waterways, but would provide beneficial use of their wastewater to restore and protect wetland areas. Additionally, within the project area, there are several industrial fabrication shops that manufacture and repair pumps, motors, and steel components that are used in the production of offshore gas and oil.
- 10. PROJECT JUSTIFICATION: Poor water quality and water stagnation is a serious threat to wetland habitat. Because swamps in the Pontchartrain Basin have been isolated from the Mississippi River, which was their primary source of water sediments and nutrients, the wetland areas continue to decline. The use of a wetland assimilation process will provide for increase productivity and regeneration of cypress and tupelo swamps, increase in sediment accretion, increase in dissolved oxygen, as well as, a reduction of concentration of nutrients in river water. The proposed project would directly create wetland habitat and reduce wetland loss rates in this area.

The treatment of wastewater through the wetlands' beneficial use process helps mitigate the impact of outer continental shelf activities due to the number of machine and fabrication facilities in the area. These facilities work and manufacture pumps, pipes, oil field accessories, and drilling components that are needed in the oil exploration process. The construction of a wastewater facility within the areas of these fabrication facilities addresses a direct impact of offshore production activities. Additionally, residents who live in close proximity to these facilities will also have the benefits of this type of wastewater treatment. The project will be designed to maximize the amount of influent wastewater that can be discharged into the wetland area to enhance wetland productivity and growth. The Parish is prepared to construct the sewer lines needed to utilize the plant and use the CIAP funds to develop the wetland wastewater assimilation process and sediment pond facility.

Presently, the Grand Point area wastewater and water quality management plan calls for all discharges to go into the Mississippi River. The use of CIAP funds to develop a wastewater wetland assimilation plant will provide a long-term beneficial use of those wastewater discharges.

11. PROJECT COST SHARE (NON-CIAP FUNDS): The Parish will pay for the material and secondary treatment plants needed to treat the residential and commercial

wastewater. Through the approval of a municipal sewerage tax, the Parish is proposing to spend \$13.2 million to install the needed collection and transportation systems. The Parish would then require a full treatment implementation program towards the elimination of discharges into the Mississippi River and other water bodies within the Parish.